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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,138	07/29/2003	Charles D. Gollnick	14206US02	7159
23446	7590	10/18/2006	EXAMINER	
MCANDREWS HELD & MALLOY, LTD			SOBUTKA, PHILIP	
500 WEST MADISON STREET			ART UNIT	PAPER NUMBER
SUITE 3400				
CHICAGO, IL 60661			2618	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/630,138	GOLLNICK ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Philip J. Sobotka	2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 04 August 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 38-46,48,49,51 and 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 38-46,48,49,51 and 52 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 25 May 1999 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/3/06, 10/11/06</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statements filed June 3, 2006 and October 11, 2006 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 51 depends from claim 50, which has been cancelled.

*(Note that claim 51 is being treated as if it depended from claim 48, see rejections below).*

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 38-46,48,49,51,52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoff (US 5,168,271) in view of Owen (GB 2250892).

Consider claim 38. Hoff teaches a radio frequency data communication system comprising:

one or more base stations each having a radio frequency transceiver (*Hoff see especially figure 2A*) and each base station transmitting a pending message list at each of selected time intervals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*);

a plurality of roaming terminals each having a radio frequency transceiver, the roaming terminals being selectively communicative with one or more base stations and each of the roaming terminals selectively deactivating the terminal's radio frequency transceiver (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

Hoff lacks a teaching of the roaming terminals selectively deactivating the terminal's radio frequency transceiver through a plurality of the selected time intervals and synchronizing the activation of the terminal's radio frequency transceiver to receive following the plurality of the selected time intervals.

Owen teaches a system in which roaming terminals selectively deactivate the terminal's radio frequency transceiver through a plurality of the selected time intervals and synchronize the activation of the terminal's radio frequency transceiver to receive a beacon following the plurality of the selected time intervals (*Owen see especially page 3, line 10 – page 4, line 18*). Owen teaches that this allows for enhanced power saving when the roaming terminal has roamed out of coverage range (*Owen see page 3, lines 29-35*).

It would have been obvious to one of ordinary skill in the art to modify Hoff to have the roaming terminals selectively deactivate through a plurality of the time intervals in order to enhance power saving when the terminal has roamed out of range as taught by Owen.

As to claim 39, Hoff in view of Owen as applied to claim 38 teaches wherein the one or more base stations transmits timing information regarding the selected time intervals to the plurality of roaming terminals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

As to claim 40, Hoff in view of Owen as applied to claim 39 teaches wherein the one or more base stations communicate the timing information during the selected time

intervals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

As to claim 41, Hoff in view of Owen as applied to claim 38 teaches wherein the one or more base stations transmits timing information regarding the selected time intervals along with each pending message list to the plurality of roaming terminals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

Consider claim 42. Hoff teaches a radio frequency data communication system comprising:

one or more base stations each having a radio frequency transceiver (*Hoff see especially figure 2A*) and each base station transmitting a pending message list at each of selected time intervals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*);

a plurality of roaming terminals each having a radio frequency transceiver, the roaming terminals being selectively communicative with one or more base stations and each of the roaming terminals selectively deactivating the terminal's radio frequency transceiver (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

Hoff lacks a teaching of the roaming terminals selectively deactivating the terminal's radio frequency transceiver through a plurality of the selected time intervals

and synchronizing the activation of the terminal's radio frequency transceiver to receive following the plurality of the selected time intervals.

Owen teaches a system in which roaming terminals selectively deactivate the terminal's radio frequency transceiver through a plurality of the selected time intervals and synchronize the activation of the terminal's radio frequency transceiver to receive a beacon following the plurality of the selected time intervals (*Owen see especially page 3, line 10 – page 4, line 18*). Owen teaches that this allows for enhanced power saving when the roaming terminal has roamed out of coverage range (*Owen see page 3, lines 29-35*).

It would have been obvious to one of ordinary skill in the art to modify Hoff to have the roaming terminals selectively deactivate through a plurality of the time intervals in order to enhance power saving when the terminal has roamed out of range as taught by Owen.

As to claim 43, Hoff in view of Owen as applied to claim 42 teaches wherein the one or more base stations transmits timing information regarding the selected time intervals to the plurality of roaming terminals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

As to claim 44, Hoff in view of Owen as applied to claim 43 teaches wherein the one or more base stations communicates the timing information during the selected time intervals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

As to claim 45, Hoff in view of Owen as applied to claim 42 teaches wherein the one or more base stations transmits tin ring information regarding the selected time intervals along with each pending message list to the plurality of roaming terminals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

Consider claim 46. Hoff teaches, for use in a radio frequency data communication system having one or more base stations (*Hoff see especially figure 2A*) each transmitting a pending message list at each of selected time intervals (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*); a roaming terminal operable in a sleep mode comprising: a radio frequency transceiver and a processor selectively deactivating the transceiver (*Hoff, figures 10,11*)

Hoff lacks a teaching of the roaming terminals selectively deactivating the terminal's radio frequency transceiver through a plurality of the selected time intervals and synchronizing the activation of the terminal's transceiver to receive following the sleep mode.

Owen teaches a system in which roaming terminals selectively deactivate the terminal's radio frequency transceiver through a plurality of the selected time intervals and synchronize the activation of the terminal's radio frequency transceiver to receive a beacon following the plurality of the selected time intervals (*Owen see especially page 3, line 10 – page 4, line 18*). Owen teaches that this allows for enhanced power saving

when the roaming terminal has roamed out of coverage range (*Owen see page 3, lines 29-35*).

It would have been obvious to one of ordinary skill in the art to modify Hoff to have the roaming terminals selectively deactivate through a plurality of the time intervals in order to enhance power saving when the terminal has roamed out of range as taught by Owen.

Consider claim 48. Hoff teaches a data communication method for a system having one or more base stations and at least one roaming terminal having a radio frequency transceiver (*Hoff see especially figure 2A*) comprising:

transmitting via radio frequency a pending message list at each of selected time intervals from a base station (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*);

and synchronizing the activation of the terminal's radio frequency transceiver to receive the pending message list following the sleep mode (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

Hoff lacks a teaching of deactivating the roaming terminal's transceiver through a plurality of the selected time intervals in a sleep mode.

Owen teaches a system in which roaming terminals selectively deactivate the terminal's radio frequency transceiver through a plurality of the selected time intervals and synchronize the activation of the terminal's radio frequency transceiver to receive a beacon following the plurality of the selected time intervals (*Owen see especially page*

3, *line 10 – page 4, line 18*). Owen teaches that this allows for enhanced power saving when the roaming terminal has roamed out of coverage range (*Owen see page 3, lines 29-35*).

It would have been obvious to one of ordinary skill in the art to modify Hoff to have the roaming terminals selectively deactivate through a plurality of the time intervals in order to enhance power saving when the terminal has roamed out of range as taught by Owen.

As to claim 49, Hoff in view of Owen as applied to claim 48 teaches the step of transmitting timing information regarding the selected time intervals from a base station.

Consider claim 51. (*Note that claim 51 is being treated as if it depended from claim 48, see rejections under 112 above*).

Hoff in view of Owen as applied to claim 48 teaches the step of transmitting timing information regarding the selected time intervals from a base station (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

Consider claim 52. Hoff teaches a method for operating a terminal with a radio frequency transceiver in a data communication system comprising:

synchronizing the activation of the roaming terminal's radio frequency transceiver to receive a message following the sleep mode (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*);

receiving a pending message list (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*);

and determining from the pending message list whether a message for the roaming terminal is awaiting delivery (*Hoff see especially column 4, line 58 – column 5, line 25, column 17, lines 15-35, column 22, lines 40-65*).

Hoff lacks a teaching of deactivating the terminal's transceiver in a sleep mode through a plurality of selected time intervals during which a beacon is transmitted.

Owen teaches a system in which roaming terminals selectively deactivate the terminal's radio frequency transceiver through a plurality of the selected time intervals and synchronize the activation of the terminal's radio frequency transceiver to receive a beacon following the plurality of the selected time intervals (*Owen see especially page 3, line 10 – page 4, line 18*). Owen teaches that this allows for enhanced power saving when the roaming terminal has roamed out of coverage range (*Owen see page 3, lines 29-35*).

It would have been obvious to one of ordinary skill in the art to modify Hoff to have the roaming terminals selectively deactivate through a plurality of the time intervals in order to enhance power saving when the terminal has roamed out of range as taught by Owen.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Sobutka whose telephone number is 571-272-7887. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177.

8. The current fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

**On July 15, 2005, the Central FAX Number will change to 571-273-8300.** This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005.

**After September 15, 2005, the old number will no longer be in service and 571-273-8300 will be the only facsimile number recognized for "centralized delivery".**

**CENTRALIZED DELIVERY POLICY:** For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

Art Unit: 2618

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 10/15/06

Philip J Sobutka

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PHILIP J. SOBUTKA  
PATENT EXAMINER